BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

# Anti-CD40 Antibody Picoband®

**Catalog Number:** PB10051

## About CD40

CD40 is a cell surface receptor that is expressed on the surface of all mature B cells and also expressed on monocytes, dendritic cells, and thymic epithelium. It is a member of the tumor necrosis factor (TNF) receptor superfamily and is the receptor for CD40 ligand. CD40 ligand (CD40L, CD154, gp39, and TRAM) belongs to the TNF gene family and is expressed more widely than CD40 predominantly on activated CD4+ T cells. Activation of CD40 has also been shown to inhibit the growth of certain B cell lymphomas and to induce the death of transformed cells of mesenchymal or epithelial origin.

## Submit a product review to Biocompare.com




Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.

## Overview

| | |
|---|---|
| Product Name | Anti-CD40 Antibody Picoband® |
| Reactive Species | Human |
| Description | Boster Bio Anti-CD40 Antibody Picoband® catalog # PB10051. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |
| Application | ELISA, Flow Cytometry, IHC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2mg Na2HPO4, 0.05 mg NaN3. |
| Storage Instructions | Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles. |
| Host | Rabbit |
| Uniprot ID | P25942 |

## Technical Details

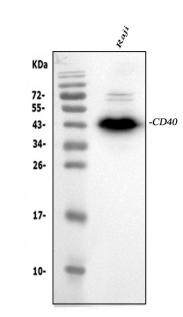
| | |
|---|---|
| Immunogen | E. coli-derived human CD40/TNFRSF5 recombinant protein (Position: E21-R193). Human CD40/TNFRSF5 shares 60.2% amino acid (aa) sequence identity with mouse CD40/TNFRSF5. |

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

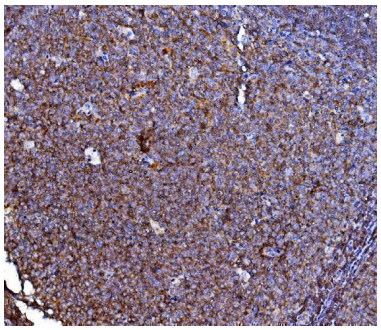
| | |
|---|---|
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). |
| Cross Reactivity | No cross-reactivity with other proteins |
| Isotype | Rabbit IgG |
| Form | Lyophilized |
| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. |
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Western blot, 0.1-0.5ug/ml, Human<br>Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human<br>Flow Cytometry (Fixed), 1-3 ug/1x$10^6$ cells, Human<br>ELISA, 0.1-0.5ug/ml, -<br><br>Note: For flow cytometry (FCM), suitable for fixed cells only. Not suitable for FACS or surface flow cytometry using live cells. |

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

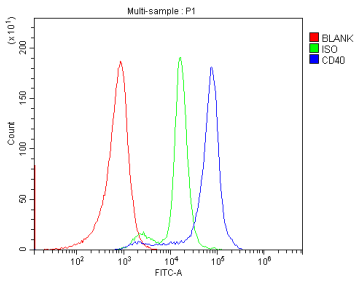
# Anti-CD40 Antibody Picoband® (PB10051) Images




Western blot analysis of CD40/TNFRSF5 using anti-CD40/TNFRSF5 antibody (PB10051). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Raji whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD40/TNFRSF5 antigen affinity purified polyclonal antibody (Catalog # PB10051) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD40/TNFRSF5 at approximately 43 kDa. The expected band size for CD40/TNFRSF5 is at 30 kDa.



IHC analysis of CD40/TNFRSF5 using anti-CD40/TNFRSF5 antibody (PB10051). CD40/TNFRSF5 was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD40/TNFRSF5 Antibody (PB10051) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.




Flow Cytometry analysis of human PBMC cells using anti-CD40/TNFRSF5 antibody (PB10051). Overlay histogram showing human PBMC cells stained with PB10051 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD40/TNFRSF5 Antibody (PB10051, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

For Research Use Only. Not for use in diagnostic procedures.